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Exploration on Training Strategies of Students in Active Learning Ability
under the Background of Digital Economy Transformation

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***Abstract.** With the transformation and development of the digital economy, higher education institutions as a major front of talent training must shoulder the mission of the times, to inject great vitality into the promotion of the nationwide digital transformation. This requires higher education institutions to attach greater importance to cultivating the comprehensive quality and competence of students in the process of teaching, and their capacity for active learning directly influences whether they can adapt to the needs of social development flexibly. On this basis, this paper conducted a sample survey of students at Jiangxi Agricultural University, from which data acquired is analyzed to find factors affecting the training of students in active learning now. Moreover, given the present conditions, several strategies and approaches for improvement are presented in the two major dimensions of students' subjective factors and objective factors in higher education institutions, so as to help students improve their capacity for active learning, promote their all-round development and accelerate the reform of the model for training digital talent.*

Keywords: digital economy; higher education institution; active learning; training strategy

1. Introduction

Led by the new generation of information technology, the rapid development of the global digital economy and industrial transformation and upgrading raise standards for the quality of talent training by higher education institutions to a new level [1]. With digital technology as a core impetus and information networks as a medium, the digital economy brings a new form of economic development following the agricultural economy and the industrial economy. To adapt to the needs of modernization, modern ways of learning integrating information technology and traditional education have become important means of training talent in higher education institutions [2]. Students enjoy more freedom in higher education institutions than in secondary schools, learning in a more independent and personalized way. Just as its name implies, a capacity for active learning refers to the ability to learn on one's own initiative, which is an indispensable skill in learning, life and work. The concept of active learning was first seen in the concepts of "learner" and "autonomy" introduced by the scholar Henry into foreign language teaching in the 1980s [3]. He defined active learning as the ability of learners to take responsibility for their own learning, that is, the capacity for active learning of students. In this process, learners should determine their own objectives and content of learning, select proper learning methods according to their own conditions, settle various problems in learning by working hard or consulting others, and finally appraise their own process of learning objectively. Different from traditional learning, active learning is a modern way of learning, which emphasizes that students actively explore the process of learning as major participants in learning and advocates active participation and hands-on practice of students.

By analyzing reasons for college students to have no capacity for active learning now, this paper explores basic strategies for training college students in active learning, and gives suggestions on how to improve the capacity for active learning of college students in practice, to provide references for enhancing abilities of students to observe, educate and evaluate themselves. The study can clarify major factors influencing the capacity for active learning of college students and strategies that should be adopted to improve their capacity. The findings can be used by education administrators and professional teachers to take a set of supporting educational measures, so as to help students improve their capacity for active learning, enhance their initiative, motivation and creativity in learning, promote the reform of the model for training talent in higher education institutions, and raise the quality of talent training.

2. Analysis of factors influencing the Cultivation of the Capacity for Active Learning

The study is aimed at exploring the current capacity for active learning of college students, and providing references for developing methods for training college students in active learning. A case study of students at Jiangxi Agricultural University was conducted by a questionnaire survey of randomly sampled

students in different classes and school years. There were 76 students surveyed in total, including 42 male students and 34 female students. Questionnaires were handed out online. Results of the reliability and validity tests of the questionnaire are shown in Table 1. The overall Cronbach's α is 0.937 (>0.9), showing high reliability; the KMO value is 0.834 (>0.8), and the level of significance is 0.000 (<0.001), with statistical significance. Passing the reliability and validity tests, the questionnaire proves to be well designed.

Table 1 Results of Reliability and Validity Tests of the Scale

Cronbach's α	KMO	Significance
0.937	0.834	0.000

According to a statistical analysis, factors influencing the cultivation of the capacity for active learning can be divided into the subjective factors of students and the objective factors of higher education institutions. Students are major participants in learning, whose subjective factors are a crucial part, including their awareness of active learning, habits of learning, experience in learning, level of cognition, etc. Many college students grow up in families where they are protected as carefully as flowers in greenhouses, so they have no awareness of independent thinking and few opportunities to train themselves. As higher education institutions are places where students learn and participate in activities, their objective factors are also indispensable, including the environment of teaching, the mode of teaching, teaching facilities and many others, which have a greater influence on the formation of the capacity for active learning of students.

3. Approaches to Cultivating and Strategies

In view of existing problems, higher education institutions also actively respond to the needs of society by launching diversified activities. Now, it is still an open question of how to improve the capacity for active learning of students and stimulate their initiative and creativity. Considering the current capacity for active learning of college students and requirements for talent training in the development of the digital economy, this paper puts forward approaches to improving the capacity for active learning of software talent in higher education institutions, in terms of subjective factors of individual students and objective factors in the external environment.

(1) Subjective Factors

Select proper learning methods, and set definite learning objectives. Students should establish lofty ideals, set definite learning objectives and strive for them. As navigators of students on their way to growth, teachers need to play a greater role in guiding students through the selection of learning objectives suitable for their own development. Students need to enhance their own awareness of active learning, make learning plans according to their own levels of learning, and shift from passive learning to active learning in the process of study. Students are encouraged to take an active part in various activities, walk out to explore the unknown world, stimulate their interest in learning, and cultivate independent thinking.

Develop good habits of learning, and strengthen self-monitoring. Though most students have an awareness of active learning, their self-control is not strong enough for them to stick to active learning for a long time, so they tend to give up halfway. Therefore, developing a good habit of active learning is conducive to urging students to improve their awareness of independence, and plays an important role in enhancing their capacity for active learning. In the process of learning every day, their own assessment of learning situations is helpful in giving timely feedback on teaching and learning, which can be reviewed and summarized.

(2) Objective Factors

Build a learning platform, and create a good environment. Abundant learning resources and a good learning environment are external conditions for improving the capacity for active learning of students. Higher education institutions should keep improving infrastructure, to create a comfortable learning environment for students. Teaching resources can also be provided in diversified ways by combining online and

offline channels, to expand the learning platform and enable students to acquire learning resources anytime and anywhere.

Engage in scientific and technological innovation, and focus on innovating in the model for talent training. Teachers should change the traditional mode of teaching, the shift from teacher-centered to student-centered teaching, guide students through independent thinking and self-criticism, stimulate the creativity of students as far as possible, and attach more importance to cultivating their innovative thinking and hands-on ability. Higher education institutions can also set up a batch of research teams with students as major participants, to promote the transformation of research achievements and thus enhance their confidence and sense of success in active learning.

4. Conclusion

Better development of the digital economy requires joint efforts of students and higher education institutions. In the educational system built by higher education institutions, through the reform of the mode of teaching and a series of measures such as improving the teaching environment, students make efforts to continuously strengthen their self-control, improve their capacity for active learning and form a good habit of lifelong learning, to promote the digital transformation of the community and economy. However, as these theoretical suggestions may also meet some problems when put into practice, they need to be further explored and improved by experts in teaching and research.

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Исследование стратегии способности студентов к самостоятельному обучению в условиях трансформации цифровой экономики

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Аннотация. В условиях трансформации и развития цифровой экономики высшие учебные заведения как важнейшие центры подготовки кадров должны выполнять миссию времени, привнеся огромную энергию в продвижение общенациональной цифровой трансформации. Необходимо, чтобы высшие учебные заведения придавали большее значение развитию всесторонних качеств и компетентности студентов в процессе преподавания, а их способность к самостоятельному обучению напрямую влияет на то, смогут ли они гибко адаптироваться к потребностям социального развития. Исходя из этого, в данной статье был проведен выборочный опрос студентов Сельскохозяйственного университета Цзянси, в ходе которого были проанализированы полученные данные для выявления факторов, влияющих на подготовку студентов к самостоятельному обучению в настоящее время. Более того, учитывая нынешние условия, представлено несколько стратегий и подходов к улучшению в двух основных измерениях субъективных факторов студентов и объективных факторов в высших учебных заведениях, чтобы помочь студентам улучшить свою способность к самостоятельному обучению, способствовать их всестороннему развитию и ускорить реформирование модели обучения цифровых кадров.

Ключевые слова: цифровая экономика; высшее учебное заведение; способности к самостоятельному обучению; стратегия обучения